

We claim :

- 210 1. A method to create a three-dimensional projection on the surface of a hollow cylindrical body near the apex point, with a distinct energy distribution in a core inside such projection.
2. A method to position a balance system coinciding with the primary heat flux system as described in 1./
3. A method to supply energy to such heat flux systems by using coherent light sources.
- 215 4. A method comprising of :
- (a) the initiation step by means of either mechanical methods (microscratches on the surface by applying an abrasive cloth or harder materials), pulsed laser sources or focused ultrasonic energy
- 220 (b) application of energy by means of using a coherent light source in a delivery suitable to create a three-dimensional beam projection encompassing the apex point and extending between 10 and 90 degrees to both sides with a distinct high energy core.
- (c) removal of energy by a balance system which is projected towards the clockwise end of the high energy core by a stream of gas or a stream of gas combined with a fluid mist.
- 225 (d) spinning a cylindrical hollow body relative to such projections in a radial speed to match the heat flux patterns of the projection system.
- (e) continuation of the process until a remaining cohesion of the sectioned segments between 80 and 0 percent is achieved.
5. An apparatus to spin cylindrical bodies by either using two rollers mounted on a linear motion system or a chuck with a bar feeder system. The displacement of the linear motion system or the pull of the bar feeder yields the desired section length relative to a stationary optical system. A control system governs the timing events of the individual phases of the process.
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